

FIG. 1

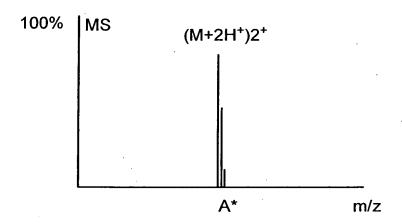
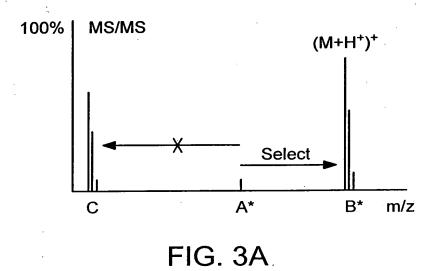
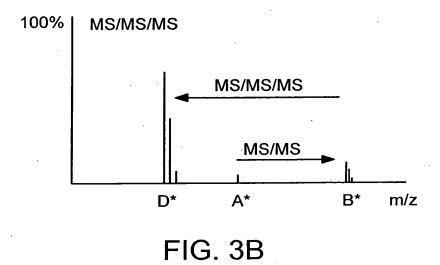


FIG. 2





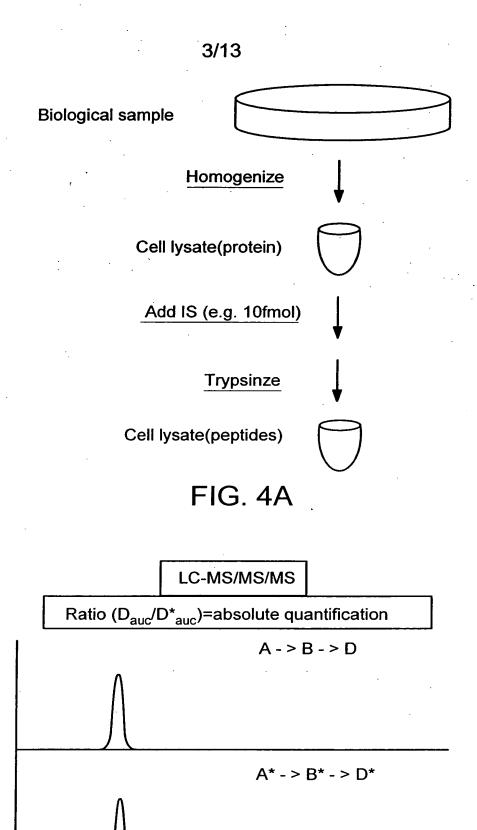


FIG. 4B

Time

Relative Intensity

\* = stable isotope (e.g.<sup>13</sup>C)

Native phosphopeptide

GF(pT)ALK

MW: 715.754

\* = stable isotope (e.g.<sup>13</sup>C)

ΙZ

IZ

I Z

Ýo:

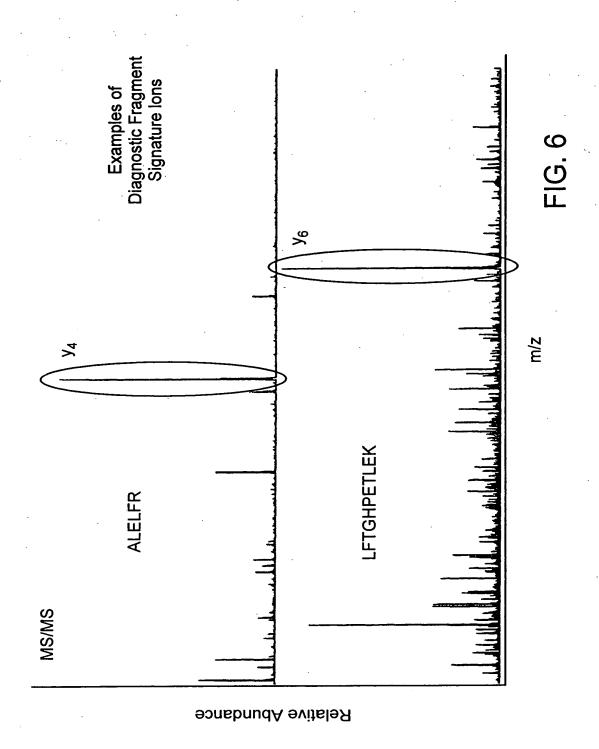
AQUA methylated peptide Internal Standard

GFTAL\*(mK)

MW:655.79

\* = stable isotope (e.g. <sup>13</sup>C)

FIG. 5C



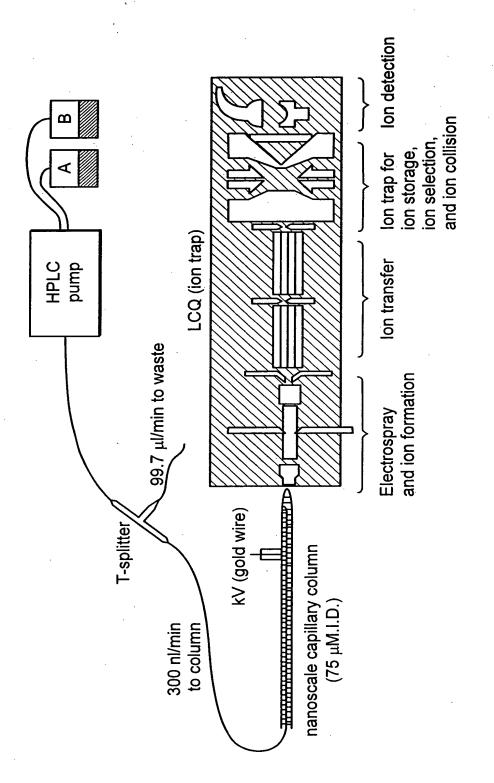


FIG. 7

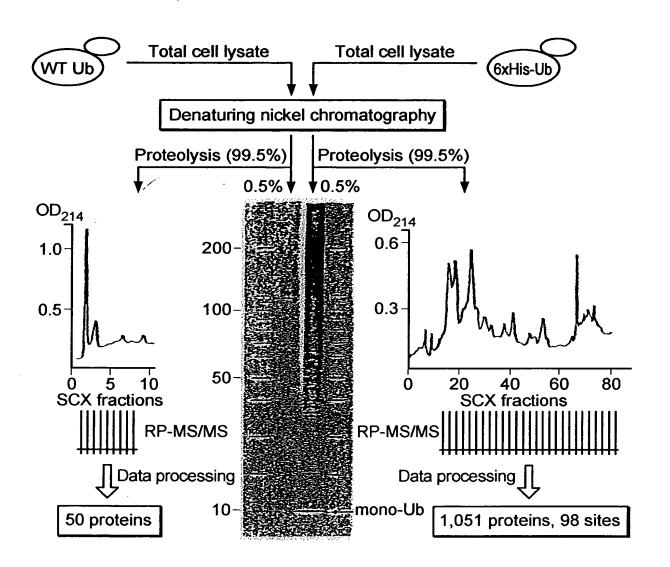


FIG. 8

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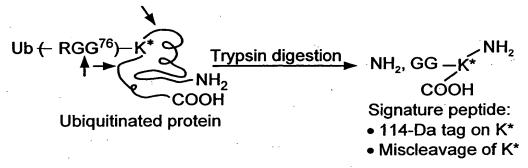
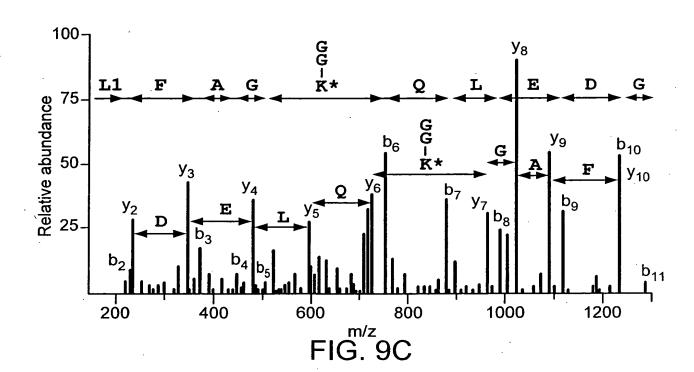


FIG. 9A

FIG. 9B



Name	#sites		MDETECDOUS	ENICOHOLOGO.	DI MOCVCORE	ODCDWANTCC	MAADDDCCTT	DUALCCLICC
Ubiquitin	5	_ /				QPSPTKKLGS		
•			•			LLGKKQNKCP		
ECM21	51		TTTPRSSTSD	TNRRTSGRLS	VDQEPRISGG	RYSQIEEDST	VLDFDDDHNS	SAVVSSDLSS
SAM2	. 4		TSLTRLANSK	KFNEQFLIEY	LTARGLLGPK	TVLSNEYLKI	SISTSGESVF	LPTISSNDDE
YHRD97C	. 3		YLSRLNGLND	GTDDAEADFF	MDGIDQQEGN	TPSLATTAAA	TESGGSINEN	RDTLLRENNS
HXT7	3		GDHPGSGSEL	NTRSVEIDSS	MVSYSIAVIV	SVKKPTRFTD	MQLELCSRVK	VFVNTGVPPT
GNP1	3	\	KTFNEEFYNA	ASMKVNLNDE	NFDLFVPLSI	SPDGQMIENN	SNDRQVRLFK	NIPTEERLYL
YILD41W	2	1	DKTKTKASLL	NAIDVNKTHL	YQPGDYVFLV	PVVFSNHIPE	TIYLPSARVS	YRLRLATKAI
YHLD1DC	2	1	NRKGFYRQDS	NSPQPIVSPD	SSSSLSSTTS	SLKLTETESA	QAHRRISNTL	FSKVKNHLHM
LSB1	2	1	SSHQLKNEES	GEEDI FAEYP	IKVIRTPPPV	AVSTANKPIY	INRVWTDSLS	YEISFAQKYV ·
ZEO1	2	1.	SLNSEVPIKI	KLAPICKNVC	VKRIHVSITE	RVTFVSKGYE	YEYDQITPVA	KDPYNPYYLD
PHOM	2	1	FASKRRKERS	VSLFEIRTKE	KGTRALREEI.	VENSFNINLE	SYSPFDDDSD	SKGNPKERLG
URA3	2		ITEPIIIETK	LKFPKYEDLD	KRTAKIIPPY	GIDAYTSIPN	PEHAVANGPS	HRRPSVIGFE
GDH1	2	- 1	SGHKGSKSHE	ENEKPVYDPK	FHQDIIKSNS	GLPVKTHTRL	NIPKRGLYLD	SLHFSNVYCR
ERG5	2	- 1	HKLEIMIRIS	KPDPECPSKL	RHYEVLIDTP	IFLVSEQGNS	GNMELPTYDM	ATMEGKGNQV
ERG3	2	- 1	PLSMNSDFFG	NICPPPPTFE	EAISVPASPI	VSPMGSPNIM	ASYDPDLLSI	QQLNLSRTTS
YGR26DC	2	1	VSGPSGYSDD	AGVPNVNRNS	ISNANAMNGS	ISNSAFVSGN	SGQGVARARA	TSVNDRSRFN
YMR295C	2	1	NLDKLLSTPS	PVNRSHNSSP	TNGLSQANGT	VRIPNATTEN	SKDKQNEFFK	KGYTLANVKD
		1	DEEQEGIVSS	SSADSLLSHG	NEPPRYDEIV	PLMSDEE		

# FIG. 10A

Site in Ub (K)	Signature peptide	SCX fraction	Abundance
48	LIFAGK*QLEDGR	48-56 (	9) high
63	TLSDYNIQK*ESTLHLVLR	65-72 (1	3) high
11	TLTGK*TITLEVESSDTIDNVK	38-42 (	5) medium
27	TITLEVESSDTIDNVK*SK	41 (	l) low
6	LISEEDLGMQIFVK*TLTGK	38 (	l) low

FIG. 10B

Name	Phosphopeptide sequence	Description of function
ACC1	AVS*VSDLSYVANSQSSPLR	Acetyl.CoA carboxylase
CCC1	GSGGTSELGGSEST*PLLR	Protein potentially in calcium regulation
CHO1	DENDGYAS*DEVGGTLSR	Phosphatidylserine synthase
CHS1	DDEYDDLNT*IDK	Chitin synthase I
CHS3	NPSTLLPTS*SMFWNK	Chitin synthase III
ECM21	NEES*GEEDIFAEYPIK	Protein possibly in cell wall biosynthesis
	HALSS*LLGGANVHSPAVLNNTTK	
	RPS*VIGFLSGHK	
	S*HNSS*PTNGLSQANGTVR	
GCD6	EEIDS*EFEDEDFEK	Translation initiation factor eIF2B
HSP3D	ASGETAIHEPEPEAEQAVEDT*A	Heat shock protein located in cell membrane
LYP1	LQVVSHET*DINEDEEEAHYEDK	High affinity lysine specific permease
MET4	KYS*DNEDDEYDDADLHGFEK	Transcriptional activator
MYO3	RGS*VYHVPLNPVQATAVR	Myosine type I
PHO84	IHDT*S*DEDMAINGLER	Inorganic phosphate/H* symporter
	NNDIESSS*PSQLQHEA	
RAD16	SVNYNELS*DDDTAVK	Nucleotide excision repair protein
Ubiguitin	TLS*DYNIQK	Protein for posttranslational modification
YDR119W	IEEINENS*PLLSAPSK	Member of major facilitator superfamily (MFS)
YDR348C	TNS*FDMPQLNTR	Protein of unknown function
YHR097C	ETVDDDSET*LNQLQDR	Protein of unknown function
	LPSYEEAAGT*PK	·
YOR042W	KNPDEDEFLINS*DDEM	Protein of unknown function
·	SSGIDEDEVVT*PAEDAKEEEEEHPPLPAR	•
	EQHHEDS*EEEDSWSQFVEK	
YPL019C	HYIADLEDHES*S*DEEGTALPK	Vacuolar polyphosphate accumulation

FIG. 10C

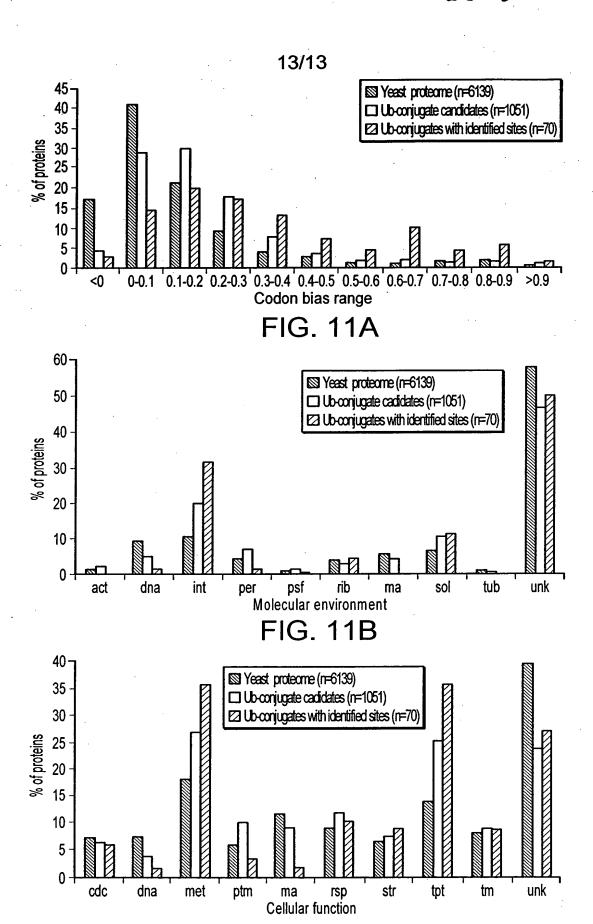


FIG. 11C